

## ABSTRACT

Modulation scheme control section 155 determines a modulation scheme of a transmission signal based on the reception electric field strength of the entire system  
5 estimated in an apparatus of a communicating party and a value of the mean effective reception electric field strength, and outputs a control signal for instructing a determined modulation scheme to S/P sections 102-1 and 102-2.

S/P sections 102-1 and 102-2 receive the transmission  
10 digital signal, perform the serial/parallel transform processing, further perform the adaptive modulation processing according to the instruction from modulation scheme control section 155. It is thereby possible to control a parameter of the modulation scheme or the like in consideration  
15 of relative relationships between channels, and it is thus possible to improve the reception quality.